

IN THE CLAIMS:

This listing of claims will replace all prior versions, and listings, of claims in the application:

1. (Currently Amended) A device manufacturing method comprising ~~the steps of:~~
  - (a) providing a polished silicon substrate having a background portion and one or more target portions, said background and target portions having Si-H bonds on the surface;
  - (b) irradiating said one or more target portions using a patterned beam of radiation and in the presence of oxygen to provide a layer of silicon oxide on said target portion(s);
  - (c) reacting at least a part of said background portion with a first composition comprising one or more compounds selected from 1-alkenes and 1-alkynes;
  - (d) removing said layer of silicon oxide from said target portion(s);
  - (e) reacting one or more target portions with a further composition comprising one or more compounds selected from 1-alkenes and 1-alkynes, to covalently attach said one or more compounds to said target portion(s).
2. (Currently Amended) A method according to claim 1, wherein ~~step (e) reacting one or more target portions~~ comprises irradiating said one or more target portions in the presence of the further composition, using a patterned beam of radiation.
3. (Previously Presented) A method according to claim 1, ~~which method further comprises comprising~~ repeating ~~step (e)~~ ~~the reacting of one or more target portions~~ one or more times, each repetition being carried out at one or more different target portions and in the presence of a further composition comprising one or more compounds selected from 1-alkenes and 1-alkynes, each further composition being the same or different.

4. (Currently Amended) A device manufacturing method comprising ~~the steps~~ of:

(a1) providing a polished silicon substrate having a background portion and one or more target portions, said background and target portions having Si-H bonds on the surface;

(b1) reacting one or more target portions with a ~~further~~ composition comprising one or more compounds selected from 1-alkenes and 1-alkynes, to covalently attach said one or more compounds to said target portion(s); and

(c1) subsequent to reacting the one or more target portions, reacting at least a part of said background portion with a first composition comprising one or more compounds selected from 1-alkenes and 1- alkynes.

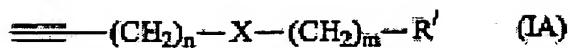
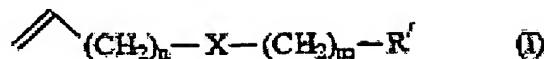
5. (Currently Amended) A method according to claim 4, wherein ~~step (b1) reacting one or more target portions~~ comprises irradiating said one or more target portions in the presence of the ~~further~~ composition, using a patterned beam of radiation.

6. (Previously Presented) A method according to claim 4, ~~which method further comprises comprising~~ repeating ~~step (b1) the reacting of one or more target portions~~ one or more times, each repetition being carried out at one or more different target portions and in the presence of the composition or a further composition, the further composition comprising one or more compounds selected from 1-alkenes and 1-alkynes, each further composition being the same or different.

7. (Previously Presented) A method according to claim 1, wherein one or more of the target portions has in its surface a part of a transistor structure.

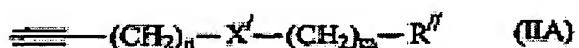
8. (Original) A method according to claim 7, wherein said silicon substrate comprises 10 or more target portions, each having a part of a transistor structure in its surface.

9. (Previously Presented) A method according to claim 1, wherein said first composition comprises one or more compounds of formula (I) or (IA):



wherein n and m independently represent an integer of from 1 to 36; X represents a single bond, -O-, -S-, -C(O)-O-, -O-C(O)- or an unsubstituted C2-C4 alkenylene or alkynylene group containing one or two double and/or triple bonds; and R' represents hydrogen.

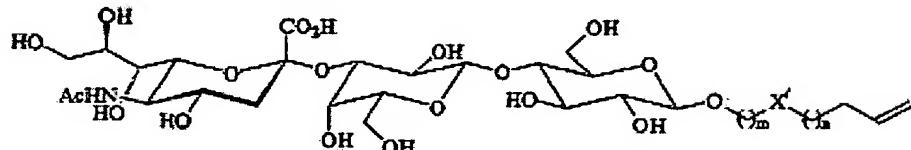
10. (Previously Presented) A method according to claim 1, wherein the further composition comprises one or more compounds of formula (II) or (IIA):



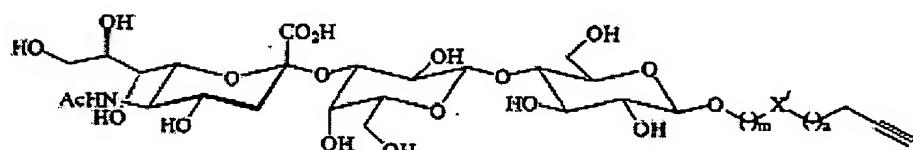
wherein n and m independently represent an integer of from 1 to 36; X' represents a single bond, -O-, -S-, -C(O)-O-, -O-C(O)- or an unsubstituted C2-C4 alkenylene or alkynylene group containing one or two double and/or triple bonds; R'' represents hydrogen or a group selected from halogens, cyanide groups, carboxylic acid derivatives including esters and amides, alkoxy groups, thio groups, amines, including mono- and di-alkylamines, hydroxy groups and receptor derivatives which are capable of interacting with a chemical or biological substance.

11. (Original) A method according to claim 10, wherein R'' represents an oligosaccharide or an oligopeptide which is capable of interacting with a chemical or biological substance.

12. (Original) A method according to claim 11, wherein said further composition comprises a compound of formula (IIIA) or (IIIB):



(IIIA)



(IIIB)

which is optionally protected on the saccharide units with protecting groups, wherein n, m and X' are as defined in claim 10.

13. (Previously Presented) A device obtained or obtainable by the method of claim 1.

14. (Withdrawn) A device comprising:

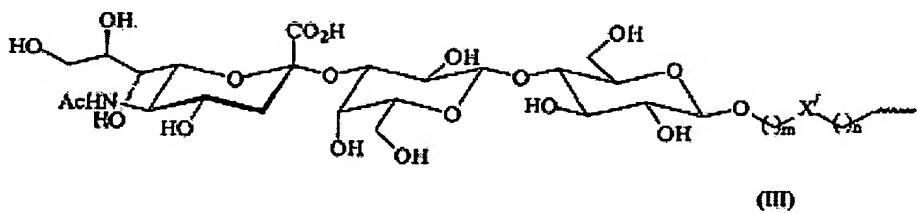
- a polished silicon substrate having a background portion and one or more target portions, at least one of said target portions having a part of a transistor structure in its surface;
- an organic monolayer which is directly coupled to at least a part of the surface of the silicon substrate by covalent bonds, said organic monolayer comprising receptor compounds, each of which is capable of interacting with a chemical or biological substance, in area(s) which cover the or each target portion having a part of a transistor structure;  
wherein the part of a transistor structure combined with the organic monolayer containing receptor compounds forms a field effect transistor.

15. (Withdrawn) A device according to claim 14, wherein said silicon substrate has 2 or more, preferably 10 or more, target portions.

16. (Withdrawn) A device according to claim 15, wherein the monolayer comprises receptor compounds of a first type in an area covering a first target portion, and receptor compounds of a different type in an area covering a second target portion.

17. (Withdrawn - Previously Presented) A device according to claim 14, wherein the monolayer in the area covering at least one target portion comprises one or more oligosaccharide or oligopeptide derivatives.

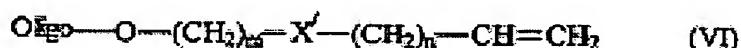
18. (Withdrawn) A device according to claim 17, wherein the monolayer in the area covering at least one target portion comprises an oligosaccharide derivative of formula (III):



wherein n, m and X' are as defined in claim 10.

19. (Withdrawn - Previously Presented) Use of a device according to claim 13 as a sensor.

20. (Withdrawn) A method of coupling an oligosaccharide or oligopeptide derivative to a polished silicon surface, which method comprises reacting a compound of formula (VI) or (VIA):



wherein Oligo represents an oligosaccharide or oligopeptide derivative and n, m and X' are as defined in claim 10, with a silicon substrate having Si-H bonds at its surface, substantially in the absence of oxygen and in the presence of heat or UV or visible radiation.